119

THE WASHINGTON POST
Saturday, Oct. 12, 1968

Joshua Lederberg

Any Kind of Contraception Is Probably Not 'Natural'

NORMAL WOMEN of child-bearing age release an egg in a regular monthly cycle. That egg remains capable of being fertilized for only a short time. The fertile interval is not accurately known in man, but observations on other animals suggest that it is between six and 30 hours.

These observations are, of course, the scientific basis of the "rhythm method" of birth control. The uncertainties about the exact length of time that the unfertilized egg remains viable are overshadowed by uncertainties and irregularities in the longer viability of sperm cells.

Advocates of the method therefore warn that the calculated period of possible fertility may be as long as ten days. Not surprisingly, this method has been less than statistically perfect in its actual application, and some women have cycles so irregular that they dare not rely on it at all.

THE CHIEF argument for the rhythm method is stated to be that it minimizes interference with the natural biological processes of the reproductive cycle. My present discussion will focus on this issue in view of the great attention that is being given elsewhere to other aspects of recent Catholic doctrine.

The classical experimental material for studying fertilization and the development of the embryo has been the frog's egg. The female frog sheds its eggs so that they are fertilized outside the body, a process that obviously lends itself to experiments that are very difficult in mammals.

As early as 1882, E. Pflueger discovered that eggs could be "overripe"; that is, that eggs that for any reason were held back from being shed gave off-spring with various obvious abnormalities. Prof. Emil Witschi, working at the State University of Iowa, has solidly verified these studies and showed further than many of the malformed embryos from overripe eggs had chromosome abnormalities which might be analogous to Down's disease in man.

Studies on mammals are much more difficult, but several workers have reported similar results with experimentally delayed fertilization in rabbits and mice. Most, but not all, of the affected embryos failed at an early stage of development and would be classified as spontaneous abortions.

SIMILAR HAZARDS might obtain for human reproduction, according to recent speculations in Nature magazine by Dr. James German of Cornell Medical College in New York and Dr. J. P. Welch of Dalhousie University, Halifax. They argue that infrequent or mistimed coitus under the rhythm system will increase the chances that an egg will be fertilized (if at all) during its dying gasp rather than during its prime of life when it ought naturally to be fertilized.

Many developmental abnormalities might then ensue. The worst abnormalities are, of course, those that do survive till birth. The existing statistics are very thin and much more research is needed to justify either a bland confidence or a condemnation of the rhythm method on these grounds.

The same theoretical suspicions attach to hormonal contraception, the pill, which is, however, demonstrably safer in preventing pregnancies. We even lack convincing statistics on the absolute safety of mechanical methods, which are usually accompanied by sperm-killing chemicals. In fact, ordinary water is possibly just as injurious as any other material.

The main point now is whether we can call any deliberate action "natural." Nature has its own wisdom, but we challenge it in every act of human will and intelligence and sometimes even by abstinence.